D,

This is J. C. Thomas O.I Co.'s Application for exemption of the Olcese Fm. in the Mt. Poso Field. It should be noted that the Injection H_2O & Fm. H_2O analysis are from different Areas. Please send to EPA for their review — Thanks

Sincerly,

Dianne Clark

$1 ppm = 1.56\ E.C. \times 10^{6}$

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Thomas Oil Company • 4311 MEADOW VIEW PLACE • ENCINO, CALIF. 91436 • 213-981-5979 • 805-872-0613

DIVISION OF OIL AND GAS

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Hal will disapprove withdrawn

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October 4, 1983

Mr. Dave Mitchell
Department of Conservation
Sivision of Oil and Gas
4800 Stockdale Hwy
Suite 417
Bakersfield, CA 93309

Original to Nathan on 1/24/84

Re: application for exemption of Olcese zone in Sec 26 T27S R28E MDBM Gardner Lease
Mt. Poso Field
Kern Co.

Dear Mr. Mitchell:

I have reviewed the Environment Protection Agency "Criteria to exempt Aquifers" and have investigated the available data relative to the above captioned disposal site.

The Olcese zone does not produce water which serves as a drinking water source within a five mile radius of the above captioned lease. A detailed search of the records of the Kern Water Agency reveals no records of domestic water wells completed in the Olcese within the entire township. A search of the local area by land revealed a total of 4 domestic water wells within a five mile radius of the site. All 4 of the wells located were completed along stream beds at shallow depths and presumed to produce water from the stream course rather than the Olcese.

Typical Analysis of the water to be injected is:

B.C. Labs, lab No.	5982	5983	5984	5985
Well No.	Dorsey Inj. well	Dorsey #2	Dorsey #3	Dorsey #4
Boron	1.2 PPM	0.82 PPM	0.90 PPM	1.1 PPM
Chloride	254 PPM	148 PPM	98.2 PPM	223 PPM
Electrical Conductivity Micromohis X 106	1590	1340	1530	1330

The Olcese is exempted on the Round Mt. Field
The Olcese ranges from [illegible]

T27S

Typical analysis of the water known to be produced from the Olcese: in Sec 28 of T28S R28E MDB&M, approximately 1.5 miles due west of the injection site is represented by the last three boiling test run on the well, tribe A6, in February 1975.

B.C. Labs, Lab No.	1172	1173	1209
Boron	2.51	2.49	3.52
Chloride	216.3	250.3	266.62
E.C. in Micromohis X 10-6	1750	1830	1900

(see enclosures)

It can readily be seen that the water produced by the Dorsey and Gardner Leases is of better quality than the water found in the Olcese Formation. It is obvious that continued disposal of the Dorsey and Gardner water into the Olcese Formation should improve rather than degrade the quality of the water in that formation. There is no record of analysis being run on residual oils and greases in the Olcese Formation water. A study of drillers logs relating to wells complete in Sec. 26 show references to "carbonaceous material", found in the Olcese Formation, although such references are not conclusive proof hydrocarbons being present, they may well be indicative of the presence of such hydrocarbons. Work is currently being done by Frank Mondary which has revealed several verifable oil shows in the Olcese zone in the Mount Poso field. That work will be in your possesion within two to three weeks, and the results of that work will be submitted as a supplement to this application.

The Dorsey area is more than ten miles from the nearest town, situated in rolling hills which are currently used for cattle grazing. The produced waters are currently used for cattle watering prior to disposal by injection into surface outcrops of the Olcese. The disposal into the Olcese was begun in the fall of 1978 and has continued to present at the rate of approximately 4000 barrels per day. Percolation of waste water into the Olcese outcrops in the stream bed has occured. Produced water from "Dorsey Area" production has been percolating into Olcese outcrops in the stream bed since 1928.

The data presented indicates that the Olcese Formation water is of lower quality than the produced water, and that the Olcese zone has been receiving produced waters since 1928 which would produce substantial hydrocarbon contamination of the Olcese zone even if the zone did not contain hydrocarbons.

Mr. Dave Mitchell
October 4, 1983

We therefore apply for exemption of the Olcese Zone in the area known as the "Dorsey Area" for the disposal of waste water porduced in that area as represented by the enclosed analysis.

If you have any questions, please call.

Sincerely,

L.C. Fiedler

LC F/bg
encl